# **PackTest**

## Leakage + Burst Test

## **Leak Burst Tester**

**LBT-15 Series** 





#### Leak Burst Tester is used to test Pouches / Cups / Tubes / Blister Packs / Trays for :

- 1. Leakage Test
- 2. Burst Test

#### **Test Modes:**

Leak Test:

Your package is tested only for leakages.

**Burst Test:** 

Your package is tested only for burst pressure.

Leak & Burst Test:

Your package is tested both for leakages and burst pressure.

#### **Principle of Operation:**

**Leak Test:** Air is injected into the package and internally pressurized up to a set pressure and held for a set time. The equipment will automatically detect leakages by monitoring the pressure drop. Additionally, if the package is tested when held under water, you will also see air bubbles from leak points. Even micro leakages which the equipment cannot detect via pressure drop, can be visible under water, making it a very reliable test.

**Burst Test:** Air is injected into the package and internally pressurized until the sample bursts. The max burst pressure is displayed. This is considered as a 360° Seal Strength / Seal Integrity Test. Additionally, you can identify the weakest point of your package as it will fail first.

**Leak Burst Test:** A combination of the above 2 tests. First the Leak Test will happen. If the package FAILS in Leak Test, the test is abandoned. If the package passes the Leak Test, it is automatically subjected to the Burst Test. So you can do 2 test on the same package, while saving time on sample preparation. And of course, you waste less samples.

2-in-1 Equipment 3 Test Modes Many Test Fixtures

#### **Technical Specifications:**

- Digital Model with Backlit LCD Display
- Electro-Pneumatic, Table Top Model
- With optional software to capture test data on to the PC directly and generate PDF test & calibration reports.
- Auto-Calibration facility for user-friendly calibration.
- Choice of Measurement units, selectable from Menu.

	bar	mbar	kPa	psi
Capacity:	5	5000	500	72.5
Resolution:	0.0005	0.5	0.05	0.007
Working Range:	0.1 - 5.000	100 - 5000	10 - 500	1.45 - 72.5

DQ/IQ/OQ Documentation are supplied with pharma-specific models.

RS-232 Data Cable with USB-Serial Convertor are supplied with all models / SKUs with software.

#### Included with all models / SKUs:

- 1) 3 mtr long, 6mm PU tube to connect your compressed air supply to the Air Filter.
- 2) 2 mtr long, 6mm PU tube to connect Air Filter to Equipment
- 3) 2 mtr long, 6mm PU tube to connect Equipment to the Test Fixture.
- Double Stage Air Filter (for models with APR) or Single Stage Air Filter (for models without APR).
- 5) Power Cable

#### **Excludes:**

1) Testing Fixtures (to be ordered separately)

#### **Software Options:**

- 1) No Software.
- 2) Regular Software (Not 21-CFR-11 Compliant).
- 3) 21-CFR-11 Compliant Software (Vantage).



Warranty: 12 Months (Ex-Factory)

#### **Utilities Required:**

- 1. Power Supply (Current : Max 5 Amps) :
  - A. For India (Domestic Model): 230 Volts A.C., 50 Hz. Clean power.
  - B. For Outside India (Export Model): As per your country's power rating.
- 2. Compressed Air @ 6 bar (87 psi)

#### For models with software

3. Desktop / Laptop PC (Intel Core i3, 4gb RAM, Win10 OS, 1080p Monitor) or higher.



## **How to Order?**

### Step 1 : Select Part Number / Equipment SKU

Region	Industry
D	N
E	Р

Equipment - Series	Extra Option
LBT-15	<blank></blank>
	Α
	Р
	AP

Software
NS
RS
CS

	Options	Description				
	D	Domestic Model For Sale in India only. Warranty / Support valid only in India				
Туре	E	Export Model for Sale outside India only. Comes with a set of emergency spares. International Quality / Warranty / Support.				
	N	For Food / Beverage / FMCG Industry. Non-Pharma.				
Industry	Р	For use in Pharmaceutical Industry.  DQ/IQ/OQ documents are provided with machine.				
<b>Equipment - Series</b>	LBT - 15	Leak Burst Tester – Series 15				
	<blank></blank>	Standard Recommended, if majority of your packages are of similar type and volume.				
	А	With Automatic Pressure Regulator (APR)  APR enables you to set the pressure increment speed for ultra precise control and higher accuracies.  Supplied with Double Stage Air Filter.  Recommended, if testing a variety of small to large packages.				
Options	P	With Pre-Filler.  Enables speedy testing of empty / deflated pouches by quickly filling them to save on testing time.  Time for Without Prefiller With Prefiller 0-100% Fill 8 – 9 mins 10 – 15 seconds  Testing Time saved = >90%  Recommended, if you want to test large (12 inch or more), deflated pouches.				
	АР	With Automatic Pressure Regulator With Pre-Filler				
	NS	No Software.				
Software	RS	Regular software. (Not 21-CFR-11 compliant) RS-232 Data Cable with USB-Serial Convertor is provided.				
Software	CS	21-CFR-11 compliant software. ( <i>Vantage</i> ). RS-232 Data Cable with USB-Serial Convertor is provided.				



Step 2 : Select Test Fixture (one or more from below)

Sr.	Probe / Fixture Type	Photo		Suitable for
1.	Needle Probe SKU: TF-LBT-NP  Includes: - Needles (10 nos) - EPDM Septum Stickers (100 nos, for 100 tests)  Recommended for < 1 bar burst pressures. Maximum up to 2 bar.	Photo		Low - Medium Burst Packages (Unrestrained):     - Pouches     - Cups     - Trays     - Tubes Testing as per ASTM F1140 / F2095  Can be used on Empty Packages or Filled Packages (using optional Inline Air Filter) See 1A below for options.
1A.	Inline Air Filter  Used along with Needle Probe for testing filled packages.  Not needed if testing empty packages only.	<b>SKU</b> For testing	Air Filter – Large J: TF-LBT-IAFL liquid / solid / powder ed packages.	Inline Air Filter – Small SKU: TF-LBT-IAFS  For testing solid or powder filled packages only.  No Liquid Allowed.
2.	Restraining Plate Fixture.  Includes: - Blister Pack Probe - Double Sided Adhesive Tape (2 rolls) - Single Hole Punch			Medium / High Burst Pouches. Or Pouches that exhibit elongation / stretch during testing.  Testing as per ASTM F2054  Can be used on Empty Pouches Only
		SKU:	Max Pouch Size	
		RP0810SS	8x10 Inches	
		RP1012SS	10x12 Inches	
		RP1218SS	12x18 Inches	
		RP2024SS	20x24 Inches	
		RP2430SS	24x30 Inches	
		RPCUSTSS	Custom Size Available	

3.	Test Stand For Screw On Tubes SKU: TF-LBT-SCTS		Can be used on Filled or Empty tubes with Screw On Caps only.  Supplied with upto 5 cap adapter as per Tube + Cap samples provided by you.  You will have to send us 5 samples of each type of tube + cap combination you wish to test.  The cap will be removed and embedded in the cap adapter for a perfect fit to the tube.
4.	Test Stand For Snap On Tubes SKU: TF-LBT-SNTS		Can be used on Empty tubes with Snap On Caps only.  You will have to send us 5 samples of each type of tube + cap combination you wish to test.  An economy option (without test stand) is available as a Test Fixture (see item 4A).
4A	Test Fixture For Snap On Tubes SKU: TF-LBT-SNTF	Snap Cap Trimmed Cap	This is an Economical Option to be used in-lieu of the above test stand.  For Snap On Caps only.  Manual Sample Clamping.  Note: Caps will need to be trimmed before testing.

5. Test Stand
For Open Tubes
SKU: TF-LBT-OTTS



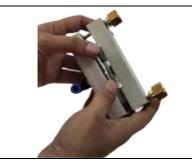
Can be used on Unsealed, Open End, Empty Tubes with either Screw On or Snap On Caps.

Supplied with 1 tube adapter (Lower Plunger + Top Plate) as per sample provided by you.

If you have multiple sizes (ID) of tubes, you will have to order multiple test adopters (SKU: TF-LBT-OTTS-TF)

You will have to send us 5 samples of each size (ID) of tube you wish to test.

6. Special Fixtures SKU: TF-LBT-CF



For Special Packages that cannot be tested with any of the above test fixtures.

Step # 3 : Select extra consumables. (for Needle Probe fixture only)

Item/Qty	10 nos	20 nos	50 nos	100 nos	200 nos	500 nos	1000 nos
Spare Needles	✓	✓	✓	✓			
Septum Stickers				✓	✓	✓	✓

#### Visit us at www.PackTest.com





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Marketed by:

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## **Examples and comparison of Part Code / SKU for Non-Pharma Industry**

	Т	уре	Extra C	ptions		Softwa	ire
Part Code / SKU	Domestic Model	Export Model	APR *	Pre-Filler	No Software	Regular Software	21-CFR-11 Compliant Software
DN-LBT-15-NS	✓				✓		
DN-LBT-15A-NS	✓		✓		✓		
DN-LBT-15P-NS	✓			✓	✓		
DN-LBT-15AP-NS	✓		✓	✓	✓		
DN-LBT-15-RS	✓					✓	
DN-LBT-15A-RS	✓		✓			✓	
DN-LBT-15P-RS	✓			✓		✓	
DN-LBT-15AP-RS	✓		✓	✓		✓	
EN-LBT-15-NS	✓				✓		
EN-LBT-15A-NS	✓		<b>√</b>		✓		
EN-LBT-15P-NS	✓			✓	✓		
EN-LBT-15AP-NS	✓		✓	✓	✓		
EN-LBT-15-RS	✓					✓	
EN-LBT-15A-RS	✓		✓			✓	
EN-LBT-15P-RS	✓			✓		✓	
EN-LBT-15AP-RS	✓		✓	✓		✓	

<sup>\*</sup> APR = Automatic Pressure Regulator.

## **Examples and comparison of Part Code / SKU for Pharmaceutical Industry**

DQ/IQ/OQ docs are included with all the models below.

	Т	уре	Extra C	ptions		Softwa	ire
Part Code / SKU	Domestic Model	Export Model	APR *	Pre-Filler	No Software	Regular Software	21-CFR-11 Compliant Software
DP-LBT-15-NS	✓				✓		
DP-LBT-15A-NS	✓		✓		✓		
DP-LBT-15P-NS	✓			✓	✓		
DP-LBT-15AP-NS	✓		✓	✓	✓		
DP-LBT-15-RS	✓					✓	
DP-LBT-15A-RS	✓		✓			✓	
DP-LBT-15P-RS	✓			✓		✓	
DP-LBT-15AP-RS	✓		✓	✓		✓	
DP-LBT-15-CS	✓						✓
DP-LBT-15A-CS	✓		✓				✓
DP-LBT-15P-CS	✓			✓			✓
DP-LBT-15AP-CS	✓		✓	✓			✓
EP-LBT-15-NS		✓			✓		
EP-LBT-15A-NS		✓	✓		✓		
EP-LBT-15P-NS		✓		✓	✓		
EP-LBT-15AP-NS		✓	✓	✓	✓		
EP-LBT-15-RS		✓				✓	
EP-LBT-15A-RS		✓	✓			✓	
EP-LBT-15P-RS		✓		✓		✓	
EP-LBT-15AP-RS		✓	✓	✓		✓	
EP-LBT-15-CS		✓					✓
EP-LBT-15A-CS		✓	✓				✓
EP-LBT-15P-CS		✓		✓			✓
EP-LBT-15AP-CS		✓	✓	✓			✓

<sup>\*</sup> APR = Automatic Pressure Regulator.



## **Software Features**

Sr No.	Feature	Regular Software (Not 21-CFR-11 Compliant)	Vantage Software (21-CFR-11 Compliant)
1	User Login	No Login. Any user can access the software.	Unlimited Users with individually configurable privileges  Incorrect Logins are logged. If user enters 3 wrong passwords, user is SUSPENDED and cannot login again even with correct password. Event is logged as Critical. Only an admin (or user with appropriate privileges can Un-Suspend the suspended user.  Auto - Logout after 15 mins of inactivity. (Timeout period can be defined)  Auto - Shutdown (software) on inactivity. (Auto-Logout will also trigger Auto-Shutdown)
2	User Rights / Privileges	Any user can: 1) Perform Test 2) Search Test 3) Calibrate     Machine 4) Configure     Software	Software Admin or any user (with Modify user privileges) can create unlimited users with any of following privileges.  1) Perform Test 2) Search Test 3) Calibrate Machine 4) View Audit Trail 5) Add / Edit / Delete users (User Management privilege) 6) Configure Software 7) Review and Approve Test / Calibration reports
3	User Levels	NA	Unlimited Users with Unlimited variable privileges. User List (summary or detailed) can be printed.
4	Software Configuration Options	1) Change Header	1) Change Test Folder 2) Change Backup Folder 3) Set Auto Backup On/Off 4) Set Auto Backup Frequency 5) Set Password Expiry On/Off 6) Set Password Expiry Time (Days) 7) Change Header
5	User Password Expiry / Change	NA	Upon user first login, user has to change password immediately. User can change his/her own password anytime. Users must change password after expiry date. Password expiry time can be defined in software config.



		I	
6	Password Complexity	NA	Password should be 1) 8-20 characters long 2) Has to contain alphabets, numbers and &%#\$@. 3) Password should contain atleast 1 uppercase, 1 lower case and 1 special character 4) New password cannot be same as previous 3 passwords.
7	User Addition / Deletion	NA	User can be added or deleted by Software Admin or anyone who has User Management privilege. User cannot delete himself. No one can delete the SUPER USER.
8	User Suspension	NA	User can be suspended/un-suspended by Software Admin or anyone who has User Management privilege. Suspended user cannot login to software. If he tries to login, a Critical Audit Trail entry will be passed.
9	Data Storage	NA	Data is stored in an internal database. PDF reports are generated as and when demanded.
10	User Signature	User must type or select his / her name when the software starts.	User's details captured from the login is posted on the report "analysis done by" section.
11	Reviewer Signature	NA	Reviewer can login with his credentials, review and approve Test and Calibration Data. Once approved, the report will carry his E-Sign.
12	Backup Data	NA	If Autobackup is ON, software will automatically backup all configuration files and test data as per frequency chosen in Software Configuration.  Note: Backup Location has to be a local drive or a network
			location mapped as a Local Drive.
13	Audit Trail Data	NA	Software captures important events and logs them in the audit trail log.  A PDF report can be generated as and when required. Critical Events will be flagged separately. Audit Trail Report can be pulled for a date range or user or event.

14	Aborted Tests / Calibrations	NA	Aborted Tests and Calibrations are saved. These events are logged in Audit Trail as "Critical".
15	Ignore a Test Value	NA	No test result can be avoided from being reported. But the user can mark a particular result as abnormal.  Abnormal results are not considered in statistical calculations but will still be shown in report.  User needs to justify the Abnormal values (if any) in the remarks section.  A test report can have 10 normal samples + up to 5 abnormal samples.
			Only normal tests will be used for statistical calculations.
16	Test / Calibration Report Format	Report Format is fixed in software. Not changeable by user.	
17	Report Header	Text Header with 3 lines of Text.	Image Header with Logo or Text Header with 3 lines of Text.
18	Other Features	NA	Incorrect Shut Downs are logged in Audit Trail.  Equipment ID is printed on all Test / Calibration / Audit Trail Reports  Automatic Pre-Calibration Diagnostics of communication.  Option of Pre-Analysis Diagnostics (10-15 seconds) to prevent communication errors.  Enhanced data handling and communication with equipment.





